

PROCEEDINGS OF THE CLUB

MEETING OF APRIL 1, 1932

The meeting was called to order at Schermerhorn Hall, Columbia University, at 8:15 P.M. by President Sinnott. There were over 200 people present, including members of the Torrey Botanical Club, Columbia University, etc.

Professor A. C. Seward of Cambridge University gave a very fine talk on "Plant Records of the Rocks."

FORMAN T. McLEAN
Secretary

MEETING OF APRIL 20, 1932

The meeting was called to order at The New York Botanical Garden at 3:30 P.M. by President Sinnott. Minutes of the meetings of March 1 and March 16 were read and approved.

Dr. Fred W. Foxworthy was elected a life member of the Club.

The following people were unanimously elected to membership in the Club: Miss Amy E. Davis, 1882 Grand Concourse, New York City; Mr. Charles P. Dring, 159 Washington Street, Mt. Vernon, N.Y.; Mr. Robert Ferrari, 283 West 11th Street, New York City; Miss Bertha Flealy, Eastside High School, Paterson, N.J.; Mr. George Harrington, 851 West 177th Street, New York City; and Miss Tillie Schnell, 319 Marcy Avenue, Brooklyn, N.Y.

The resignations of Miss Laura M. Bragg and Mrs. Grace R. Frazee were accepted with regret.

A report was made by the Budget Committee.

Mr. Joseph J. Copeland of the College of the City of New York gave a very interesting talk on "A Botanical View of the History of the Yellowstone." The talk was illustrated by colored lantern slides.

FORMAN T. McLEAN
Secretary

MEETING OF MAY 3, 1932

The meeting was called to order at the American Museum of Natural History at 8:15 P.M. by President Sinnott.

Mr. Clarence Lewis, 1000 Park Avenue, New York City, and Miss Dorothy V. Smith, 138 East 94th Street, New York City, were unanimously elected to membership in the Club.

Dr. John M. Arthur of the Boyce Thompson Institute for Plant Research in Yonkers gave an interesting talk on "Some Effects of Visible and Invisible Radiation." His talk was illustrated by a large number of lantern slides. He showed that *Salvia* flowers best with a day length less than seventeen hours. Lettuce flowers only with a day exceeding twelve hours in length. Buckwheat was unaffected by day length, growing even better with twenty-four hours of illumination than with ordinary light and darkness. Geraniums grew and flowered best with eighteen hours of light and extra carbondioxide (ten times the strength ordinarily found in the air). Tomato in contrast with buckwheat flowered best with eighteen hours of light, twenty-four hours of illumination being injurious. With continuous illumination tomatoes accumulated large amounts of carbohydrates and were deficient in nitrogen. He also showed the effects of different portions of the solar spectrum on the growth of plants. In blue light only, four o'clocks were very deep green in color but much dwarfed in spite of the fact that the light was reduced only 10 per cent of the energy value of sunlight. In red light of 37 per cent strength, the same kinds of plants were etiolated. Petunias showed the same sort of response.

Ultra-violet light which has been so widely exploited as beneficial to man and domestic animals proved definitely injurious to plants when the wave lengths were shorter than those encountered in daylight. Even the wave length of 285 millimeters, only five millimeters shorter than those found in ordinary daylight injured plants after fifty hours' exposure. Where the reduced intensities of light were the same composition as sunlight most of the plants thrive best and made the greatest dry growth with 78 to 35 per cent of full sunlight. Tomato and tobacco proved to be shade, plants thriving best with only 35 per cent full light. Dr. Arthur also gave a very interesting report on the reddening of apples. The Macintosh apples grown in New York State are many of them poorly colored. He found that by exposing them to sunlight soon after harvest in August or September, they developed a good red color, but if exposed under window glass no such color developed. Light from the mercury arc lamp injured the

tissues of the apple and prevented coloring at all. Even the light of an incandescent lamp proved injurious to the apples. The injury, however, was not all due to ultra-violet. Using a non-luminous lamp made up entirely of infra-red rays, the same kind of injury was produced. He found ultra-violet lamps with a screen of corex D glass or pyrex glass will color apples satisfactorily during August or September in about forty-eight hours' time. In this way apples raised in the East can be given as good a color as the Western apples. This treatment does not change the flavor or quality but improves the looks of the apples.

FORMAN T. McLEAN
Secretary

NEWS NOTES

THE NEW YORK State Conservation Department has added to the state forest preserve 24,000 acres of land this spring. The larger part is in Herkimer County, near Beaver River. This tract is heavily timbered with virgin forest. The smaller tract consists of 3,000 acres comprising Howell's Island in the Seneca River, near Seneca Falls, Cayuga County. This is mostly meadow land and in the Montezuma marshes. It will be developed as a game refuge and public hunting ground.

AT THE FIFTIETH meeting of the German Botanical Society in Berlin Dr. E. D. Merrill, Director of the New York Botanical Garden, was elected an honorary member. Two other American botanists have received this honor in the past, Dr. Asa Gray and Dr. Roland Thaxter. At the same meeting Dr. George Shull, of Princeton, was elected a corresponding member. Dr. R. A. Harper, A. S. Hitchcock, E. D. Merrill, B. L. Robinson, and William Trelease were already on this list.

THE TORREY BOTANICAL CLUB

Contributors of accepted articles and reviews who wish six gratuitous copies of the number of TORREYA in which their paper appears, will kindly notify the editor, when returning proof.

Reprints should be ordered when galley proof is returned to the editor. George Banta Pub. Co., Menasha, Wisc. have furnished the following rates:

	4pp.	8pp.	12pp.	16pp.	20pp.	24pp.	28pp.	32pp.	48pp.	64pp.
25 copies	\$1.54	\$2.70	\$4.01	\$ 4.84	\$ 6.21	\$ 7.15	\$ 8.90	\$9.29	\$13.80	\$17.49
50 "	1.81	3.19	4.67	5.61	7.31	8.52	10.34	10.28	15.56	19.08
75 "	2.14	3.68	5.33	6.21	8.36	9.62	11.49	12.37	17.21	21.94
100 "	2.47	4.18	5.88	6.98	9.07	10.78	12.60	13.69	19.30	24.25
150 "	2.97	5.06	7.15	8.36	11.22	13.31	15.62	16.72	23.48	29.48
200 "	3.85	5.55	7.86	9.18	12.44	14.85	17.38	18.53	25.90	32.56
300 "	4.23	6.82	10.12	11.77	16.33	19.30	22.55	23.15	33.22	41.14

Covers similar to that of Torreyia. First 50 copies, \$2.25. Additional covers, 1½ cents each. Plates: 100 for \$1.00

Committees for 1932

Finance Committee

R. A. HARPER, *Chairman*
 J. H. BARNHART
 N. L. BRITTON
 MRS. HELEN M. TRELEASE
 C. S. GAGER

Entertainment Committee

J. S. KARLING, *Chairman*
 A. H. GRAVES
 MRS. R. A. HARPER
 MRS. G. T. HASTINGS
 MRS. WM. MITCHELL

Budget Committee

J. H. BARNHART, *Chairman*
 B. O. DODGE
 S. F. TRELEASE
 R. A. HARPER
 T. E. HAZEN
 M. A. HOWE
 H. H. RUSBY
 E. W. SINNOTT

Field Committee

RAYMOND H. TORREY, *Chairman*
 MRS. G. P. ANDERSON
 A. T. BEALS
 B. T. BUTLER
 H. M. DENSLow
 CLYDE FISHER
 ALFRED GUNDERSEN
 MICHAEL LEVINE
 HELENE LUNT
 ZAIDA NICHOLSON
 HENRY K. SVENSON
 JOHN S. WARE

Membership Committee

J. K. SMALL, *Chairman*
 T. E. HAZEN
 S. F. TRELEASE

Program Committee

FORMAN T. MCLEAN, *Chairman*
 MRS. E. G. BRITTON
 WM. CROCKER
 A. H. GRAVES
 T. E. HAZEN

Endowment Committee

N. L. BRITTON
 CAROLINE C. HAYNES
 MRS. S. F. TRELEASE

Local Flora Committee

N. L. BRITTON, *Chairman*

Phanerogams:

N. L. BRITTON H. M. DENSLow K. K. MACKENZIE NORMAN TAYLOR
 R. H. CHENEY BAYARD LONG HESTER M. RUSK

Cryptogams:

MRS. G. P. ANDERSON A. W. EVANS T. E. HAZEN
 MRS. E. G. BRITTON CAROLINE C. HAYNES M. A. HOWE
 MICHAEL LEVINE F. J. SEAVER

Chairmen of Special Committees on Local Flora

Ferns and Fern Allies: R. C. Benedict
 Mosses: Mrs. E. G. Britton
 Liverworts: A. W. Evans
 Fresh Water Algae: T. E. Hazen
 Marine Algae: M. A. Howe
 Gasteromycetes: Clyde Fisher
 Russula and Lactarius: Miss G. S. Burlingham
 Cortinari: R. A. Harper
 Polyporeae: M. Levine
 Rusts and Smuts: P. Wilson
 Discomycetes: F. J. Seaver
 Lichens: Mrs. G. P. Anderson
 Hypocreaceae, Plectascineae, Tubercineae: F. J. Seaver
 Erysiphaceae: G. M. Reed
 Sclerotium-forming Fungi: Arlow B. Stout
 Imperfecti: F. J. Seaver
 Phycomycetes: A. F. Blakeslee
 Yeast and Bacteria: Miss J. Broadhurst
 Myxomycetes: R. Hagelstein

OTHER PUBLICATIONS
OF THE
TORREY BOTANICAL CLUB

(1) BULLETIN

A journal devoted to general botany, established in 1870 and published monthly, except during July, August, and September. Vol. 58, published in 1931, contained 562 pages of text and 45 full page plates. Price \$6.00 per annum. For Europe, \$6.25.

In addition to papers giving the results of research, each issue contains the INDEX TO AMERICAN BOTANICAL LITERATURE—a very comprehensive bibliography of current publications in American botany. Many workers find this an extremely valuable feature of the BULLETIN.

Of former volumes, 24-58 can be supplied separately at \$6.00 each; certain numbers of other volumes are available, but the entire stock of some numbers has been reserved for the completion of sets. Single copies (75 cents) will be furnished only when not breaking complete volumes.

(2) MEMOIRS

The MEMOIRS, established 1889, are published at irregular intervals. Volumes 1-18 are now completed. The subscription price is fixed at \$3.00 per volume in advance; Vol. 17, containing Proceedings of the Semi-Centennial Anniversary of the Club, 490 pages, was issued in 1918, price \$5.00. Certain numbers can also be purchased singly. A list of titles of the individual papers and of prices will be furnished on application.

(3) Index to American Botanical Literature, reprinted monthly on cards, and furnished to subscribers at three cents a card.

Correspondence relating to the above publications should be addressed to

MRS. HELEN M. TRELEASE
Box 42 Schermerhorn Hall,
Columbia University,
New York, N.Y.

TORREYA

A BI-MONTHLY JOURNAL OF BOTANICAL NOTES AND NEWS

EDITED FOR

THE TORREY BOTANICAL CLUB

BY

GEORGE T. HASTINGS



John Torrey, 1796-1873

CONTENTS

Inwood Park, Manhattan. ARTHUR H. GRAVES.....	117
Some Changes in the Weed Flora of Whatcom Co., Wash. W. C. MUENSCHER.....	130
Stations for the Southern White Cedar.....	134
Field Trips of the Club.....	136
News Notes.....	142

PUBLISHED FOR THE CLUB

By THE GEORGE BANTA PUBLISHING COMPANY
450-454 AHNAP STREET, MENASHA, WISCONSIN

Entered as second class matter at the post office at Menasha, Wisconsin,
under the Act of March 3, 1879.